WO 2004/067739 PCT/DK2004/000050

CLAIMS

5

15

25

A coated granule comprising in the core a uniform mixture of a detergent enzyme having an alkaline pH activity optimum, and at least 10% w/w of acidic buffer component, wherein said acidic buffer component has a pH of 1 to below 7 when measured as a 10 % aqueous solution and a pK_a in the range of 4 to 9.

- 2. The granule according to claim 1, wherein the pH of the acidic buffer component is 3 to below 7.
- 3. The granule according to claim 1, wherein the pK_a of the acidic buffer component is 5 to 7.
 - 4. The granule according to any of the claims 1 to 3, further comprising an acidic buffer component in the coating.
 - The granule according to claim 4, wherein the amount of acidic buffer component present in the core is more than 20 % of the total amount of acidic buffer component present in the granule.
- 6. The granule according to claim 4, wherein the acidic buffer component in the core and in the coating are different.
 - 7. The granule according to claim 4, wherein the acidic buffer component in the core has a pH of 4 to below 7 and the acidic buffer component in the coating has a pH of 1 to 5.
 - 8. The granule according to claim 1 comprising at least 25 % w/w of acidic buffer component in the core.
- The granule according to claim 1 comprising at least 40 % w/w of acidic buffer component in the core.
 - 10. The granule according to any of the claims 1 to 9, wherein the acidic buffer components are selected from the group consisting of NaH₂PO₄, KH₂PO₄, Ca(H₂PO₄)₂ and sodium hexametaphosphate or mixtures thereof.

WO 2004/067739 PCT/DK2004/000050

11. The granule according to any of the claims 1 to 9, wherein the acidic buffer components are selected from the group consisting of polyacrylic acid and partly neutralized polyacrylic acid and co-polymers thereof, citric acid and Na₂H-citrate.

- 12. Use of a granule according to any of the claims 1 to 11, in a detergent composition comprising alkaline components.
- 13. A detergent composition comprising a granule of claims 1-11
- 14. A process for preparing granules of claims 1-11 comprising preparing a core comprising a detergent enzyme having an alkaline pH activity optimum and at least 10% w/w of acidic buffer component having a pH of 1 to below 7 when measured as a 10 % aqueous solution and a pKa in the range of 4 to 9, and coating the core with a coating material.
- 15. The process according to claim 14, wherein the granule is prepared in a mixer, a fluid bed, a fluidized spray dryer, a spray fluidizer, a spray dryer or an extruder.
 - 16. Use of an acidic buffer component having a pH of 1 to below 7 when measured as a 10 % aqueous solution and a pKa in the range of 4 to 9 for stabilizing a detergent enzyme having an alkaline pH activity optimum.
 - 17. Use of an acidic buffer component having a pH of 1 to below 7 when measured as a 10 % aqueous solution and a pKa in the range of 4 to 9 for increasing or decreasing the release time of the detergent enzymes in to aqueous solutions.

25

20

5

10